APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,924	10/21/2003	James L. Cihla	00121-003000000	6911

31064   7590   04/01/2009
WIESNER & ASSOCIATES
366 CAMBRIDGE AVENUE
PALO ALTO, CA 94306

EXAMINER
KEEFER, MICHAEL E

ART UNIT	PAPER NUMBER
2454	

MAIL DATE	DELIVERY MODE
04/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/690,924	CIHLA ET AL.
	Examiner	Art Unit
	MICHAEL E. KEEFER	2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 October 2003</u>.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>21 October 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/9/2006, 6/6/2006, 1/31/2006</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____

DETAILED ACTION

1.   This Office Action is responsive to the Application filed 10/21/2003.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-3, 6, and 8-20 are rejected under 35 U.S.C. 102(e) as being anticipated

by Barri et al. (US 6657962).

Regarding **claim 3**, Barri discloses:

An apparatus including a server for reducing data flow congestion when

processing data between a plurality of devices connected via a network, said

server comprising:

a plurality of ports configured for ingress and egress of a plurality of data

frames having a first format; (Fig. 2, note ingress and egress ports)

a plurality of port manager processors, coupled to said plurality of ingress

ports and said plurality of egress ports, said plurality of port manager processors

being configured to translate said plurality of data frames between said first

format and a second format, said plurality of port manager processors being

further configured to detect first congestion and to control a first data flow of said

plurality of data frames when said first congestion is detected; (Fig. 2 note free queue 110/128, also 114-116 and 132-130) see also Col. 3 lines 5-25)

a plurality of traffic manager processors, coupled to said plurality of port manager processors, said plurality of traffic manager processors being configured to communicate said plurality of data frames with associated ones of said plurality of port manager processors, said plurality of traffic manager processors being further configured to detect second congestion and to control a second data flow of said plurality of data frames when said second congestion is detected; and (Fig. 2 108 and 126 see also Col. 3 lines 5-25)

a plurality of storage processors coupled together and coupled to said plurality of traffic manager processors, said plurality of storage processors being configured to direct said plurality of data frames according to an associated ingress port and an associated egress port of said plurality of ports, said plurality of storage processors being further configured to detect third congestion and to control a third data flow of said plurality of data frames when said third congestion is detected. (Fig. 2, 104 see also Col. 3 lines 5-25)

Regarding **claim 6**, Barri discloses:

The apparatus of claim 3, wherein said plurality of ports comprises eight Fibre Channel ports, said plurality of port manager processors comprises four port manager processors, said plurality of traffic manager processors comprises two traffic manager 4 processors, and said plurality of storage processors comprises two storage processors. (See fig. 2)

Regarding **claim 8**, Barri discloses:

The apparatus of claim 3, wherein one of said plurality of data frames travels in an ingress direction via one of said plurality of ports, then via one of said plurality of port manager processors, then via one of said traffic manager processors, then via one of said plurality of storage processors. (Note Fig. 2, where ingress packets flow through the ingress processors, through the switch fabric, and out through the egress ports)

Regarding **claim 9**, Barri discloses:

The apparatus of claim 3, wherein one of said plurality of data frames travels in an egress direction via one of said plurality of storage processors, then via one of said traffic manager processors, then via one of said plurality of port manager processors, then via one of said plurality of ports. (Note Fig. 2, where ingress packets flow through the ingress processors, through the switch fabric, and out through the egress ports)

Regarding **claim 10**, Barri discloses:

The apparatus of claim 3, wherein said first congestion comprises ingress congestion, wherein one of said plurality of port manager processors detects said ingress congestion via a signal from an associated one of said plurality of traffic manager processors, and wherein said one of said plurality of port manager processors controls said first data flow by buffering packets of said plurality of data frames. (See col. 6 lines 11-43, which disclose various signals related to congestion and congestion control being transmitted for the ingress direction.)

Regarding **claim 11**, Barri discloses:

The apparatus of claim 3, wherein said first congestion comprises egress congestion, wherein one of said plurality of port manager processors sends a signal to an associated one of said plurality of traffic manager processors, and wherein said associated one of said plurality of traffic manager processors controls said second data flow in response to said signal. (See Col. 9 lines 1-32 which discuss the various messages and flow control parameters set for congestion in the egress direction)

Regarding **claim 12**, Barri discloses:

The apparatus of claim 3, further comprising: a plurality of buffers, coupled to said plurality of traffic manager processors, configured to buffer one or more of said plurality of data frames when said second congestion is detected. (See Fig. 2, note the queues in the egress and ingress modules)

Regarding **claim 13**, Barri discloses:

The apparatus of claim 3, wherein said second congestion comprises ingress congestion, wherein one of said plurality of traffic manager processors sends a signal to an associated one of said plurality of port manager processors, and wherein said associated one 4 of said plurality of port manager processors controls said first data flow in response to said 5 signal. (See col. 6 lines 11-43, which disclose various signals related to congestion and congestion control being transmitted for the ingress direction.)

Regarding **claim 14**, Barri discloses:

The apparatus of claim , wherein said second congestion comprises egress congestion, wherein one of said plurality of traffic manager processors sends a signal to an associated one of said plurality of storage processors, and wherein said associated one of said plurality of storage processors controls said third data flow in response to said signal. (See Col. 9 lines 1-32 which discuss the various messages and flow control parameters set for congestion in the egress direction)

Regarding **claim 15**, Barri discloses:

The apparatus of claim 3, wherein one of said plurality of traffic manager processors sends a queue status message to an associated one of said plurality of storage processors, and said associated one of said plurality of storage processors controls said third data flow in response to said queue status message. (See Fig. 2, note the queues in the egress and ingress modules)

Regarding **claim 16**, Barri discloses:

The apparatus of claim 3, wherein said third congestion comprises ingress congestion, wherein one of said plurality of storage processors sends a first signal to an associated one of said plurality of traffic manager processors, wherein said associated one of said plurality of traffic manager processors controls said second data flow in response to said first signal and sends a second signal to an associated one of said plurality of port manager processors, and wherein said associated one of said plurality of port manager processors controls said first data flow in response to said second signal. (See col. 6 lines

11-43, which disclose various signals related to congestion and congestion control being transmitted for the ingress direction.)

Regarding **claim 17**, Barri discloses:

The apparatus of claim 3, wherein said third congestion comprises egress congestion, wherein a first one of said plurality of storage processors sends a signal to a second one of said plurality of storage processors, and wherein said second one of said plurality of storage processors controls said third data flow in response to said signal. (See Col. 9 lines 1-32 which discuss the various messages and flow control parameters set for congestion in the egress direction)

Regarding **claim 18**, Barri discloses:

The apparatus of claim 3, wherein one of said plurality of storage processors includes: an egress buffer configured to buffer one or more of said plurality of data frames when said third congestion, corresponding to egress congestion, is detected. (see Fig. 2, note the queues in the switch fabric)

Regarding **claim 19**, Barri discloses:

The apparatus of claim 3, wherein one of said plurality of storage processors includes: an ingress buffer configured to buffer one or more of said plurality of data frames when said third congestion, corresponding to ingress congestion, is detected. (see Fig. 2, note the queues in the switch fabric)

Regarding **claim 20**, Barri discloses:

The apparatus of claim 3, wherein one of said plurality of storage processors executes a computer program that controls said one of said plurality

of storage processors to control said third data flow and to send congestion

information to another of said plurality of storage processors. (Computer

programs are inherent in the functionality described in Barri.)

Claims 1 and 2 recite similar limitations to claim 3, but are of much broader

scope than claim 3, and thus are rejected for the same reasons as claim 3.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Barri as applied to claim 3 above, and further in view of Cometto et al. (US

2003/0115355), hereafter Cometto.

Barri discloses all the elements of claims 4 and 5 except for the use of Fibre

Channel.

The general concept of needing a network element for congestion control in a

Fiber Channel network is well known in the art as taught by Cometto. ([0032])

It would have been obvious to one of ordinary skill in the art at the time of the

invention to combine Barri and Cometto in order to make the system more versatile.

6.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barri as

applied to claim 3 above, and further in view of Zhao et al. (US 20030123455), hereafter

Zhao.

Barri discloses all the limitations of claim 7 except for the use of SONET.

The general concept of using SONET is well known in the art as taught by Zhao.

([0157])

It would have been obvious to one of ordinary skill in the art at the time of the

invention to combine Barri with Zhao in order to make the system more versatile.

Conclusion

7.   The Examiner invites Applicant to schedule a telephonic interview to discuss

claim amendments that may overcome the art of record.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MICHAEL E. KEEFER whose telephone number is

(571)270-1591. The examiner can normally be reached on Monday through Friday

9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 3/27/2009

/Dustin Nguyen/
Primary Examiner, Art Unit 2454